City of Wilmington

MICHAEL S. PURZYCKI
Mayor

Katayoun Pierstani
Division of Air Quality
100 West Water St Suite 6A
Dover, DE 19904

Katayoun Pierstani,

Enclosed are 2 copies of forms AQM-1, AQM-2, AQM-4.6 and AQM-5 requesting a new Air Quality Permit to replace #APC-2002/0711-Operation. The original dust collected manufactured by Griffin has been replaced with Bin Vent Model TBV-2 dust collection system manufactured by Donaldson-Torit.

Also, on form AQM-1 we are requesting a name change on the permit. Christiana Oh, Assistant Water Division Director, Department of Public Works is now the person listed on the application due to Sean Duffy's retirement this past year.

Sincerely,

Chris Oh
Assistant Water Division Director
City of Wilmington, DPW
302-576-3017
coh@wilmingtonde.gov

Administrative Information

One original and one copy of All Application Forms Should Be Mailed To:
Division of Air Quality
100 West Water Street, Suite 6A
Dover, DE 19904

All Checks Should Be Made Payable To:
State of Delaware

Company and Site Information

1.	Company Name: **City of Wilmington DPW**		
2.	Company Mailing Address: **800 French Street**		
	City: **Wilmington**	State: **DE**	Zip Code: **19801**
3.	Site Name: **Porter Filter Plant**		
4.	Site Mailing Address: **2052 East Park Drive** *(if different from above)*		
	City: **Wilmington**	State: **DE**	Zip Code: **19803**
5.	Physical Location of Site: *(if different from above)*		
	City:	State:	Zip Code:
6.	Site Billing Address: **City of Wilmington DPW 800 French St.** *(if different from above)*		
	City: **Wilmington**	State: **DE**	Zip Code: **19801**
7.	Air Quality Management Facility ID Number: **1000300025**		
8.	Site NAICS Code): **221310** *(list all that apply*		
9.	Site SIC Code: **4941** *(list all that apply)*		
10.	Site Location Coordinates:	Latitude: 39 ° 46' 25.846" Longitude: -75 ° 32' 27.618"	
11.	Is the Facility New or Existing?	☐ NEW	☒ EXISTING
If the Facility is an Existing Facility, Complete the Rest of Question 11. If Not, Proceed to Question 12.			
11.1.	Does the Facility Have Active Air Permits?	☒ YES	☐ NO
12.	Is this Application For New Equipment or a Modification to Existing Equipment? ☐ New Equipment ☒ Modification of Existing Equipment ☒ Other (Specify): **Replacement with different manufacturer**		
If the application is for the modification of existing equipment, complete the rest of Question 12. If not, proceed to Question 13.			

Company and Site Information

12.1. Does the Equipment Have an Active Air Permit? ☒ YES ☐ NO

If the equipment has an active air permit, complete the rest of Question 12. If not, proceed to Question 13.

12.2. Permit Number of Existing Equipment: **APC-2002/0711-Operation**

13. Status of Equipment Being Applied For:
☒ Natural Minor Source
☐ Synthetic Minor Source
☐ Major Source
☐ Federally Enforceable Restrictions

14. Facility Status: ☒ Natural Minor Facility ☐ Synthetic Minor Facility ☐ Major Facility

If the facility is a Major Source, complete the rest of Question 14. If not, proceed to Question 15.

14.1. Responsible Official Name:

14.2. Responsible Official Title:

Contact Information

15. Name of Owner or Facility Manager: **City of Wilmington**

16. Title of Owner or Facility Manager: **Public Works**

17. Permit Contact Name: **Christiana Oh**

18. Permit Contact Title: **Assistant Water Division Director**

19. Permit Contact Telephone Number: **302-576-3017**

20. Permit Contact Fax Number: **302-573-5539**

21. Permit Contact E-Mail Address: **coh@wilmingtonde.gov**

22. Billing Contact Name: **Travon Wooten**

23. Billing Contact Title: **Account Clerk**

24. Billing Contact Telephone Number: **302-576-2583**

25. Billing Contact Fax Number:

26. Billing Contact E-Mail Address: **tjwooten@wilmingtonde.gov**

Proposed Construction and Operating Schedule

27. When Will the Proposed Construction/Installation/Modification Occur: 10/01/2019

28. Proposed Operating Schedule: hours/day days/week **52** weeks/year

28.1. Is There Any Additional Information Regarding the Operating Schedule? ☒ YES ☐ NO

If YES, complete the rest of Question 28. If NO, proceed to Question 29.

Proposed Construction and Operating Schedule

28.2. Describe the Additional Information: **Baghouse is only operated during refilling of the silo which happens on an average of 2 hours once every two weeks year round.**

Coastal Zone Information

29. Is the Facility Located in the Coastal Zone? ☐ YES ☒ NO

If the facility is located in the Coastal Zone complete the rest of Question 29. If not, proceed to Question 30.

29.1. Is a Coastal Zone Permit Required for Construction or Operation of the Source Being Applied for? ☐ YES ☒ NO

Attach a copy of the Coastal Zone Determination if it has not been previously submitted

If a Coastal Zone Permit is required complete the rest of Question 29. If not, proceed to Question 30.

29.2. Has a Coastal Zone Permit Been Issued? ☐ YES ☐ NO

Attach a copy of the Coastal Zone Permit if it has not been previously submitted

Local Zoning Information

30. Parcel Zoning:

Attach Proof of Local Zoning if it has not been previously submitted

Application Information

31. Is the Appropriate Application Fee Attached? ☒ YES ☐ NO

32. Is the Advertising Fee Attached? ☒ YES ☐ NO

For help determining your application and advertising fees see:
http://www.dnrec.state.de.us/DNREC2000/Library/Fees/DE%20Permit%20Fees.htm

Attach the appropriate fees. Note that your Application will not be considered complete if the appropriate fees are not included.

33. Is a Cover Letter Describing the Process Attached? ☒ YES ☐ NO

Attach a brief cover letter describing your Application.

If the Facility is a New Facility complete Question 34. If not, proceed to Question35.

34. Is a Copy of the Applicant Background Information Questionnaire on Record at the Department? ☐ YES ☐ NO

If NO, complete the rest of Question 34. If YES, process to Question 35.

34.1 Is a Copy of the Applicant Background Information Questionnaire Attached? ☐ YES ☐ NO

For a copy of the Applicant Background Information Questionnaire see
http://www.dnrec.delaware.gov/services/Documents/Chapter79Form.pdf

Attach a copy of the Applicant Background Information Questionnaire if applicable.

35. Check Which Application Forms are Attached:

DNREC – Division of Air Quality
Application to Construct, Operate, or Modify Stationary Sources

Application Information

☒ AQM-1	☐ AQM-3.4	☐ AQM-3.9	☐ AQM-3.14	☐ AQM-4.4	☐ AQM-4.9	☐ AQM-6
☐ AQM-2	☐ AQM-3.5	☐ AQM-3.10	☐ AQM-3.15	☐ AQM-4.5	☐ AQM-4.10	
☐ AQM-3.1	☐ AQM-3.6	☐ AQM-3.11	☐ AQM-4.1	☒ AQM-4.6	☐ AQM-4.11	
☐ AQM-3.2	☐ AQM-3.7	☐ AQM-3.12	☐ AQM-4.2	☐ AQM-4.7	☐ AQM-4.12	
☐ AQM-3.3	☐ AQM-3.8	☐ AQM-3.13	☐ AQM-4.3	☐ AQM-4.8	☒ AQM-5	

36. Check Which Documents are Attached:

- ☐ Coastal Zone Determination
- ☐ Coastal Zone Permit
- ☐ Proof of Local Zoning
- ☒ Application Fee
- ☒ Advertising Fee
- ☐ Applicant Background Information Questionnaire
- ☐ Claim of Confidentiality
- ☐ Manufacturer Specification(s)
- ☐ Material Safety Data Sheets (MSDSs)
- ☐ Supporting Calculations
- ☐ Descriptive Cover Letter
- ☒ Other (Specify): **Cover Letter**

Confidentiality Information

37. Do You Consider Any of the Information Submitted With this Application Confidential? ☐ YES ☒ NO

For help on how to submit a confidentiality claim see
http://regulations.delaware.gov/register/december2011/final/15%20DE%20Reg%20864%2012-01-11.htm

If a Claim of Confidentiality is made it MUST meet the requirements of Section 6 of DNREC's Freedom of Information ("FOIA") Regulation at the time the Application is submitted.

Signature Block

I, the undersigned, hereby certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all of its attachments as to the truth, accuracy, and completeness of this information. I certify based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete. By signing this form, I certify that I have not changed, altered, or deleted any portions of this application. I acknowledge that I cannot commence construction, alteration, modification or initiate operation until I receive written approval (i.e. permit, registration, or exemption letter) from the Department. I acknowledge that I may be required to perform testing of the equipment to receive construction or operation approval, and that if I do not receive approval to construct or operate that I may appeal the decision.

Christiana Oh
Owner or Operator

2/12/2020
Date

Signature of Owner or Operator

One Original and One Copy of All Application Forms Should Be Mailed To:
Division of Air Quality
100 W. Water Street, Suite 6A
Dover, Delaware 19904

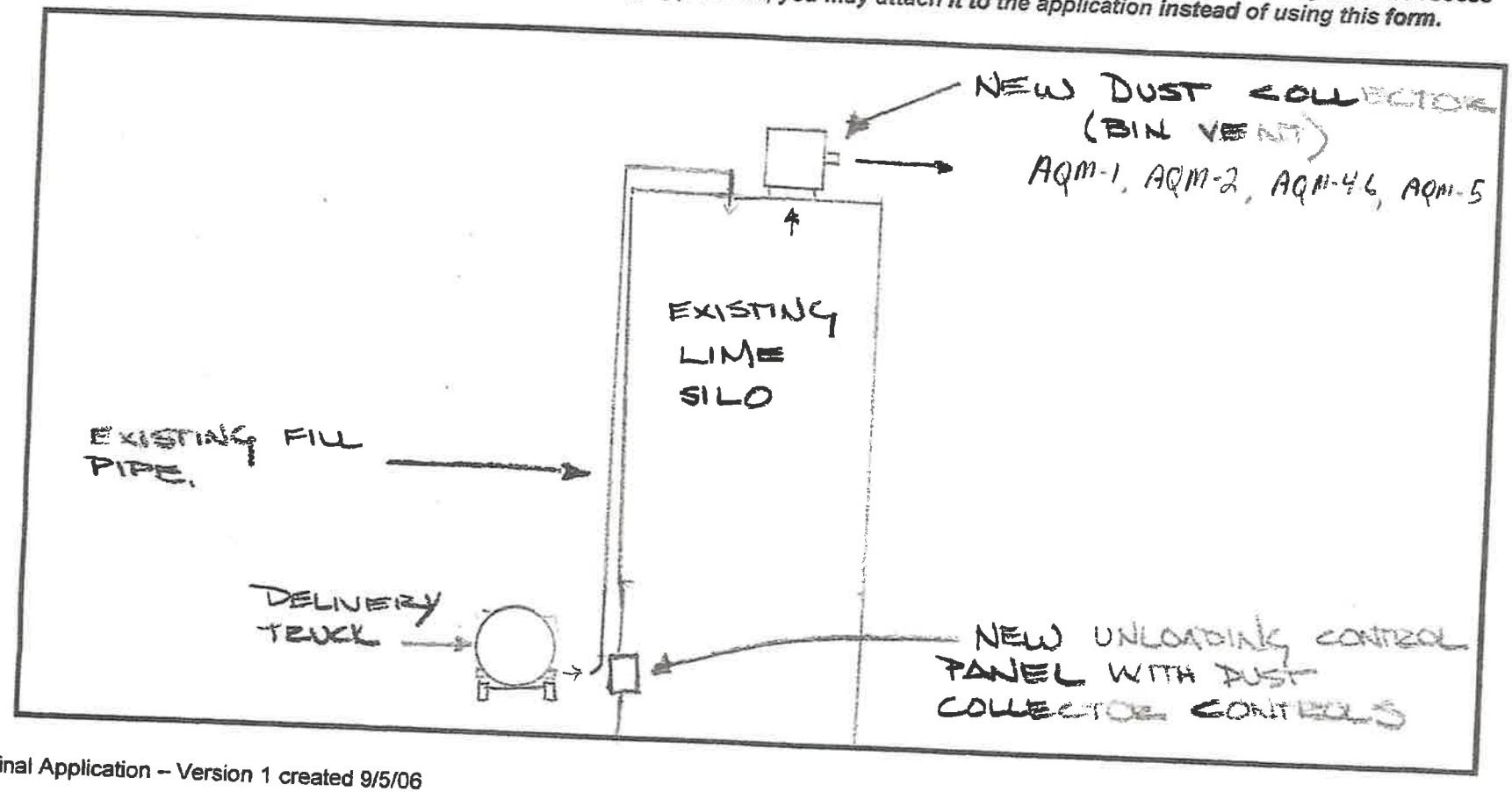
All Checks Should Be Made Payable To:
State of Delaware

DNREC – Air Quality Management Section
Application to Construct, Operate, or Modify Stationary Sources

Form AQM-2
Page 1 of 1

Process Flow Diagram

Sketch the Process Flow Diagram for the equipment or process being applied for. Include each emission unit and control device (even existing emission units that will not be modified by this application). You may identify each emission unit with a simple shape. Label each emission unit and control device with a unique identifier. Show the relationship between each emission unit and/or control device by drawing arrows between them to indicate the flow of air pollutants. List which application forms are included for each emission unit or control device below the shape representing each emission unit or control device . See http://www.delaware.gov/reg2/default.htm for example Process Flow Diagrams for common processes. If you already have a Process Flow Diagram for the equipment or process being applied for, you may attach it to the application instead of using this form.



Baghouse Application

If you are using this form electronically, press F1 at any time for help

General Information

1.	Facility Name: **Porter Filter Plant**
2.	Equipment ID Number: **Lime Silo Bin Vent**
3.	Manufacturer: **Donaldson Company, Inc.**
4.	Model: **Torit Bin Vent TBV-2**
5.	Serial Number: **13533023-L1-1**
6.	Is the Baghouse Insulated? ☐ YES ☒ NO
7.	Design Minimum Operating Temperature: **None °F**
8.	Design Maximum Operating Temperature: **180 °F**
9.	Are Temperature Controls Provided? ☐ YES ☒ NO
If Yes, complete the rest of Question 9. If no, proceed to Question 10.	
9.1.	Describe the Temperature Controls: **Not Applicable**
10.	Air Flow Through Baghouse: ☒ Forced ☐ Induced ☐ Other (Specify):
11.	Direction of Flow Through Filters: ☐ Inside Out ☒ Outside In
12.	Particulate Removal Efficiency: **99 %**
Attach the Manufacturer's Specification Sheet for the Baghouse and Particle Size Removal Efficiency Curve and basis of determination.	

Compartment Information

13.	Number of Compartments: **1**
14.	Number of Filters (Bags) Per Compartment: **2**
15.	Can the Compartments be Isolated for Replacement or Repair? ☐ YES ☒ NO

Gas Stream Information

16.	Maximum Inlet Volumetric Gas Flow Rate: **N/A acfm at N/A °F**
17.	Maximum Outlet Volumetric Gas Flow Rate: **N/A acfm at N/A °F**
18.	Dew Point at Maximum Moisture Content of Gas: **N/A °F**

Gas Stream Information

19. pH of Gas Handled: **N/A**

20. Dust Characteristics: (Check All That Apply)
- ☐ Sticky
- ☐ Wet
- ☐ Corrosive
- ☐ Dry
- ☐ Other (Specify):

Contaminant Information

21. Percent of Each Contaminant in the Waste Gas and Removal Efficiency

If more than five Contaminants are present, attach additional copies of this page as needed.

	Contaminant Name	Contaminant CAS Number	Percent of Waste Gas	Removal Efficiency
21.1.	**N/A**		%	%
21.2.			%	%
21.3.			%	%
21.4.			%	%
21.5.			%	%

Fabric Filter (Bag) Information

22. Fabric Type:
- ☐ Felted
- ☐ Woven
- ☐ Felted-Woven
- ☒ Membrane
- ☐ PTFE Membrane
- ☐ Sintered Metal
- ☐ Ceramic Cartridge
- ☐ Other (Specify):

23. Fabric Material: **Cellulose Substrate with fine fiber membrane**

24. Maximum Continuous Filter Operating Temperature: **180 °F**

25. Clean Fabric Permeability: **4** scfm/ft² at ΔP **0.3-0.8** inches of water

26. Fabric Filter (Bag) Diameter or Width: **12.74 inches**

27. Fabric Filter (Bag) Length: **26 inches**

28. Effective Area Per Filter: **452 square feet**

29. Minimum Effective Air to Cloth Ratio: 2.0 **feet/min**

30. Maximum Effective Air to Cloth Ratio: 4.5 **feet/min**

31. Design Pressure Drop Across Baghouse: N/A **inches water**

32. Describe Determining Factor Fabric Filter Changing/Replacement: **Based on water gauge reading differential of 4 to 5 inches water gauge across the filter.**

Attach the Manufacturer's Specification Sheet for the Fabric Filters (Bags).

Filter Cleaning Information

33. Filter Cleaning Method:
☐ Manual Cleaning ☐ Bag Collapse ☐ Reverse Air Jet
☐ Mechanical Shakers ☐ Sonic Cleaning ☒ Pulse Jet
☐ Pneumatic Shakers ☐ Reverse Air Flow ☐ Other (Specify):

If Reverse Air Jet or Pulse Jet is used, complete the rest of Question 33. If not, proceed to Question 34.

33.1. Air Pressure: 90 **psi**

33.2. Describe How Air Is Supplied to System: **Compressed air piping**

34. Describe How Filter Cleaning Is Initiated: ☒ Manual ☐ Pressure Drop ☐ Timer ☐ Other (Specify):

Hopper Information

35. Is the Hopper Heated? ☐ YES ☒ NO

36. Is there a Hopper Vibrator? ☐ YES ☒ NO

37. Describe How Collected Material is Treated or Disposed of: **Material collected on filter cartridges is removed using pulsed jet and drops back into the silo for usage.**

Stack Information

38. Emission Point Name: **NOT APPLICABLE**

38.1. Stack Height Above Grade: **feet**

38.2. Stack Exit Diameter: **feet**
(Provide Stack Dimensions If Rectangular Stack)

38.3. Is a Stack Cap Present? ☐ YES ☐ NO

38.4. Stack Configuration: ☐ Vertical ☐ Horizontal ☐ Downward-Venting
(check all that apply) ☐ Other (Specify):

38.5. Stack Exit Gas Temperature: **°F**

38.6. Stack Exit Gas Flow Rate: **ACFM**

38.7. Distance to Nearest Property Line: **feet**

38.8. Describe Nearest Obstruction:

38.9. Height of Nearest Obstruction: **feet**

38.10. Distance to Nearest Obstruction: **feet**

Stack Information

38.11. Are Stack Sampling Ports Provided? ☐ YES ☐ NO

Monitoring and Alarm Information

39. Are There Any Alarms You Would Like the Department to Consider When Drafting the Permit? ☐ YES ☒ NO

If YES, complete the rest of Question 39. If NO, proceed to Question 40.

39.1. Describe the System Alarm(s):

If there are more than five alarms, attach additional copies of this page as needed.

	Operating Parameter Monitored	Describe Alarm Trigger	Monitoring Device or Alarm Type	Does the Alarm Initiate an Automated Response?
39.1.1.			☐ Visual ☐ Auditory ☐ Automatic (Remote Monitoring) ☐ Other	☐ NO ☐ YES Describe:
39.1.2.			☐ Visual ☐ Auditory ☐ Automatic (Remote Monitoring) ☐ Other	☐ NO ☐ YES Describe:
39.1.3.			☐ Visual ☐ Auditory ☐ Automatic (Remote Monitoring) ☐ Other	☐ NO ☐ YES Describe:
39.1.4.			☐ Visual ☐ Auditory ☐ Automatic (Remote Monitoring) ☐ Other	☐ NO ☐ YES Describe:
39.1.5.			☐ Visual ☐ Auditory ☐ Automatic (Remote Monitoring) ☐ Other	☐ NO ☐ YES Describe:

Additional Information

40. Is There Any Additional Information Pertinent to this Application? ☐ YES ☒ NO

If YES, complete the rest of Question 40.

40.1. Describe: **Bin Vent is used during the filling of the silo with calcium hydroxide (hydrated lime) which is used to treat drinking water.**

Emissions Information Application

If you are using this form electronically, press F1 at any time for help

Process Information	
1.	Number of Individual Pieces of Process Equipment in Process: **1 - Lime Silo**
2.	Number of Individual Control Devices in Process: **1**

Emissions Information for First Emission Point/Stack	
3.	Emission Point Name: **Lime Silo Bin Vent**
4.	Equipment ID Number for all Process Equipment and Control Devices Venting Through Emission Point/Stack: **n/a**
5.	Pollutant Emissions

If more than 15 pollutants are emitted at this Emission Point/Stack, attach additional copies of this page as needed.

	Pollutant Name (Specify VOCs and HAPs Individually in 5.10 through 5.18)	CAS Number (Not required for 5.1 through 5.10)	Maximum Uncontrolled Emission Rate at Design Capacity	Maximum Controlled Emission Rate at Design Capacity	Annual Potential to Emit (PTE)	Requested Permitted Annual Emissions
5.1.	Particulate Matter (PM)	**N/A**	**0 lbs/hour**	**0.729 lbs/hour**	**0.0175** tons/year	**0.018** tons/year
5.2.	PM_{10}	**N/A**	**0 lbs/hour**	**0.729 lbs/hour**	**0.0175** tons/year	**0.018** tons/year
5.3.	$PM_{2.5}$		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.4.	Sulfur Oxides (SO_x)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.5.	Nitrogen Oxides (NO_x)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.6.	Carbon Monoxide (CO)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.7.	Total Volatile Organic Compounds (VOCs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.8.	Total Hazardous Air Pollutants (HAPs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year

Emissions Information for First Emission Point/Stack						
5.9.	CO_2		lbs/hour	lbs/hour	tons/year	tons/year
5.10.	CO_{2e}		lbs/hour	lbs/hour	tons/year	tons/year
5.11.			lbs/hour	lbs/hour	tons/year	tons/year
5.12.			lbs/hour	lbs/hour	tons/year	tons/year
5.13.			lbs/hour	lbs/hour	tons/year	tons/year
5.14.			lbs/hour	lbs/hour	tons/year	tons/year
5.15.			lbs/hour	lbs/hour	tons/year	tons/year
6.	Provide Any Additional Information Necessary to Understanding the Emission Rates Provided Above: **Bin Vent is used during the off-loading of lime into the storage silo. Off-loading will occur no more than 2 times per month. Emissions Rate was determined using EPA AP-42. Maximum Controlled Emission Rate is based on total of 48 hours of operation per year. Requested emissions to maintain same as existing permit.**					
Attach the Basis of Determination or Calculations for each Emission Rate provided above.						

Emissions Information for Second Emission Point/Stack						
7.	Emission Point Name:					
8.	Equipment ID Number for all Process Equipment and Control Devices Venting Through Emission Point/Stack:					
9.	Pollutant Emissions					
If more than 15 pollutants are emitted at this Emission Point/Stack, attach additional copies of this page as needed.						
	Pollutant Name (Specify VOCs and HAPs Individually in 9.10 through 9.18)	CAS Number (Not required for 9.1 through 9.10)	Maximum Uncontrolled Emission Rate at Design Capacity	Maximum Controlled Emission Rate at Design Capacity	Annual Potential to Emit (PTE)	Requested Permitted Annual Emissions
9.1.	Particulate Matter (PM)		lbs/hour	lbs/hour	tons/year	tons/year
9.2.	PM_{10}		lbs/hour	lbs/hour	tons/year	tons/year
9.3.	$PM_{2.5}$		lbs/hour	lbs/hour	tons/year	tons/year

Emissions Information for Second Emission Point/Stack						
9.4.	Sulfur Oxides (SO_x)		lbs/hour	lbs/hour	tons/year	tons/year
9.5.	Nitrogen Oxides (NO_x)		lbs/hour	lbs/hour	tons/year	tons/year
9.6.	Carbon Monoxide (CO)		lbs/hour	lbs/hour	tons/year	tons/year
9.7.	Total Volatile Organic Compounds (VOCs)		lbs/hour	lbs/hour	tons/year	tons/year
9.8.	Total Hazardous Air Pollutants (HAPs)		lbs/hour	lbs/hour	tons/year	tons/year
9.9.	CO_2		lbs/hour	lbs/hour	tons/year	tons/year
9.10.	CO_{2e}		lbs/hour	lbs/hour	tons/year	tons/year
9.11.			lbs/hour	lbs/hour	tons/year	tons/year
9.12.			lbs/hour	lbs/hour	tons/year	tons/year
9.13.			lbs/hour	lbs/hour	tons/year	tons/year
9.14.			lbs/hour	lbs/hour	tons/year	tons/year
9.15.			lbs/hour	lbs/hour	tons/year	tons/year
10.	Provide Any Additional Information Necessary to Understanding the Emission Rates Provided Above:					
Attach the Basis of Determination or Calculations for each Emission Rate provided above.						

Emissions Information for Third Emission Point/Stack
11. Emission Point Name:
12. Equipment ID Number for all Process Equipment and Control Devices Venting Through Emission Point/Stack:
13. Pollutant Emissions
If more than 15 pollutants are emitted at this Emission Point/Stack, attach additional copies of this page as needed.

Emissions Information for Third Emission Point/Stack

	Pollutant Name (Specify VOCs and HAPs Individually in 13.10 through 13.18)	CAS Number (Not required for 13.1 through 13.10)	Maximum Uncontrolled Emission Rate at Design Capacity	Maximum Controlled Emission Rate at Design Capacity	Annual Potential to Emit (PTE)	Requested Permitted Annual Emissions
13.1.	Particulate Matter (PM)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.2.	PM_{10}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.3.	$PM_{2.5}$		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.4.	Sulfur Oxides (SO_x)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.5.	Nitrogen Oxides (NO_x)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.6.	Carbon Monoxide (CO)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.7.	Total Volatile Organic Compounds (VOCs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.8.	Total Hazardous Air Pollutants (HAPs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.9.	CO_2		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.10.	CO_{2e}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.11.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.12.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.13.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.14.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.15.			**lbs/hour**	**lbs/hour**	tons/year	tons/year

14. Provide Any Additional Information Necessary to Understanding the Emission Rates Provided Above:

Attach the Basis of Determination or Calculations for each Emission Rate provided above.

Emissions Information for Fourth Emission Point/Stack

15. Emission Point Name:

16. Equipment ID Number for all Process Equipment and Control Devices Venting Through Emission Point/Stack:

17. Pollutant Emissions

If more than 15 pollutants are emitted at this Emission Point/Stack, attach additional copies of this page as needed.

	Pollutant Name (Specify VOCs and HAPs Individually in 17.10 through 17.18)	CAS Number (Not required for 17.1 through 17.10)	Maximum Uncontrolled Emission Rate at Design Capacity	Maximum Controlled Emission Rate at Design Capacity	Annual Potential to Emit (PTE)	Requested Permitted Annual Emissions
17.1.	Particulate Matter (PM)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.2.	PM_{10}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.3.	$PM_{2.5}$		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.4.	Sulfur Oxides (SO_X)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.5.	Nitrogen Oxides (NO_X)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.6.	Carbon Monoxide (CO)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.7.	Volatile Organic Compounds (VOCs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.8.	Total Hazardous Air Pollutants (HAPs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.9.	CO_2		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.10.	CO_{2e}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.11.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.12.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.13.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.14.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.15.			**lbs/hour**	**lbs/hour**	tons/year	tons/year

Emissions Information for Fourth Emission Point/Stack

18. Provide Any Additional Information Necessary to Understanding the Emission Rates Provided Above:

Attach the Basis of Determination or Calculations for each Emission Rate provided above.

If there are more than four Emission Points/Stacks, attach additional copies of this form as needed.

Overall Process Emissions

19. Pollutant Emissions

If more than 15 pollutants are emitted from this Process, attach additional copies of this page as needed.

	Pollutant Name (Specify VOCs and HAPs Individually in 19.10 through 19.18)	CAS Number (Not required for 19.1 through 19.10)	Maximum Uncontrolled Emission Rate at Design Capacity	Maximum Controlled Emission Rate at Design Capacity	Annual Potential to Emit (PTE)	Requested Permitted Annual Emissions
19.1.	Particulate Matter (PM)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.2.	PM_{10}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.3.	$PM_{2.5}$		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.4.	Sulfur Oxides (SO_X)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.5.	Nitrogen Oxides (NO_X)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.6.	Carbon Monoxide (CO)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.7.	Total Volatile Organic Compounds (VOCs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.8.	Total Hazardous Air Pollutants (HAPs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.9.	CO_2		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.10.	CO_{2e}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.12.			**lbs/hour**	**lbs/hour**	tons/year	tons/year

Overall Process Emissions

19.13.		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.14.		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.15.		**lbs/hour**	**lbs/hour**	tons/year	tons/year

20. Provide Any Additional Information Necessary to Understanding the Emission Rates Provided Above:

Attach the Basis of Determination or Calculations for each Emission Rate provided above.

Minor New Source Review Information

21. Does the Process Have the Potential to Emit More Than Five Tons Per Year of Any Pollutant? ☐ YES ☐ NO

22. Is the Source New or Existing? ☐ NEW ☐ EXISTING
See Question 11 of AQM-1

If the Process has the Potential to Emit more than five tons per year of any pollutant, and is a New Source, a Control Technology Analysis pursuant to Regulation No. 1125 Section 4 must be conducted and attached to this application.

Major New Source Review Information

23. Does the Process Have the Potential to Emit More Than the Significance Level for Any Pollutant? *(Check All That Apply)*

- ☐ Greater Than 25 Tons Per Year of Particulate Matter (PM)
- ☐ Greater Than 15 Tons Per Year of PM_{10}
- ☐ Greater Than 10 Tons Per Year of $PM_{2.5}$
- ☐ Greater Than 40 Tons Per Year of Sulfur Dioxide(SO_2)
- ☐ Greater Than 25 Tons Per Year of Nitrogen Oxides (NO_X) in New Castle and Kent County
- ☐ Greater Than 100 Tons Per Year of Nitrogen Oxides (NO_X) in Sussex County
- ☐ Greater Than 100 Tons Per Year of Carbon Monoxide (CO)
- ☐ Greater Than 25 Tons Per Year of Total Volatile Organic Compounds (VOCs) in New Castle and Kent County
- ☐ Greater Than 50 Tons Per Year of Total Volatile Organic Compounds (VOCs) in Sussex County
- ☐ Greater Than 75,000 Tons Per Year of Equivalent Carbon Dioxide (CO_{2e})

If the Process has the Potential to Emit greater than any of the amounts listed above 7 DE Admin. Code 1125 Sections 2 and/or 3 apply. Contact the Department at (302) 323-4542 or (302) 739-9402 for additional information

Additional Information

24. Is There Any Additional Information Pertinent to this Application? ☐ YES ☐ NO

If YES, complete the rest of Question 24.

24.1. Describe:

DNREC – Division of Air Quality
Application to Construct, Operate, or Modify Stationary Sources

Administrative Information

One original and one copy of All Application Forms Should Be Mailed To:
Division of Air Quality
100 West Water Street, Suite 6A
Dover, DE 19904

All Checks Should Be Made Payable To:
State of Delaware

Company and Site Information

1. Company Name: **City of Wilmington DPW**
2. Company Mailing Address: **800 French Street**
   City: **Wilmington** State: **DE** Zip Code: **19801**
3. Site Name: **Porter Filter Plant**
4. Site Mailing Address: **2052 East Park Drive**
   (if different from above)
   City: **Wilmington** State: **DE** Zip Code: **19803**
5. Physical Location of Site:
   (if different from above)
   City: State: Zip Code:
6. Site Billing Address: **City of Wilmington DPW 800 French St.**
   (if different from above)
   City: **Wilmington** State: **DE** Zip Code: **19801**
7. Air Quality Management Facility ID Number: **1000300025**
8. Site NAICS Code): **221310**
   (list all that apply
9. Site SIC Code: **4941**
   (list all that apply)
10. Site Location Coordinates: Latitude: 39 ° 46' 25.846"
    Longitude: -75 ° 32' 27.618"
11. Is the Facility New or Existing? ☐ NEW ☒ EXISTING

If the Facility is an Existing Facility, Complete the Rest of Question 11. If Not, Proceed to Question 12.

11.1. Does the Facility Have Active Air Permits? ☒ YES ☐ NO

12. Is this Application For New Equipment or a Modification to Existing Equipment?
    ☐ New Equipment
    ☒ Modification of Existing Equipment
    ☒ Other (Specify): **Replacement with different manufacturer**

If the application is for the modification of existing equipment, complete the rest of Question 12. If not, proceed to Question 13.

Company and Site Information	
12.1. Does the Equipment Have an Active Air Permit?	☒ YES ☐ NO
If the equipment has an active air permit, complete the rest of Question 12. If not, proceed to Question 13.	
12.2. Permit Number of Existing Equipment:	**APC-2002/0711-Operation**
13. Status of Equipment Being Applied For:	☒ Natural Minor Source ☐ Synthetic Minor Source ☐ Major Source ☐ Federally Enforceable Restrictions
14. Facility Status:	☒ Natural Minor Facility ☐ Synthetic Minor Facility ☐ Major Facility
If the facility is a Major Source, complete the rest of Question 14. If not, proceed to Question 15.	
14.1. Responsible Official Name:	
14.2. Responsible Official Title:	

Contact Information	
15.	Name of Owner or Facility Manager: **City of Wilmington**
16.	Title of Owner or Facility Manager: **Public Works**
17.	Permit Contact Name: **Christiana Oh**
18.	Permit Contact Title: **Assistant Water Division Director**
19.	Permit Contact Telephone Number: **302-576-3017**
20.	Permit Contact Fax Number: **302-573-5539**
21.	Permit Contact E-Mail Address: **coh@wilmingtonde.gov**
22.	Billing Contact Name: **Travon Wooten**
23.	Billing Contact Title: **Account Clerk**
24.	Billing Contact Telephone Number: **302-576-2583**
25.	Billing Contact Fax Number:
26.	Billing Contact E-Mail Address: **tjwooten@wilmingtonde.gov**

Proposed Construction and Operating Schedule	
27.	When Will the Proposed Construction/Installation/Modification Occur: 10/01/2019
28.	Proposed Operating Schedule: hours/day days/week **52** weeks/year
28.1.	Is There Any Additional Information Regarding the Operating Schedule? ☒ YES ☐ NO
If YES, complete the rest of Question 28. If NO, proceed to Question 29.	

Proposed Construction and Operating Schedule

28.2. Describe the Additional Information: **Baghouse is only operated during refilling of the silo which happens on an average of 2 hours once every two weeks year round.**

Coastal Zone Information

29. Is the Facility Located in the Coastal Zone? ☐ YES ☒ NO

If the facility is located in the Coastal Zone complete the rest of Question 29. If not, proceed to Question 30.

29.1. Is a Coastal Zone Permit Required for Construction or Operation of the Source Being Applied for? ☐ YES ☒ NO

Attach a copy of the Coastal Zone Determination if it has not been previously submitted

If a Coastal Zone Permit is required complete the rest of Question 29. If not, proceed to Question 30.

29.2. Has a Coastal Zone Permit Been Issued? ☐ YES ☐ NO

Attach a copy of the Coastal Zone Permit if it has not been previously submitted

Local Zoning Information

30. Parcel Zoning:

Attach Proof of Local Zoning if it has not been previously submitted

Application Information

31. Is the Appropriate Application Fee Attached? ☒ YES ☐ NO

32. Is the Advertising Fee Attached? ☒ YES ☐ NO

For help determining your application and advertising fees see:
http://www.dnrec.state.de.us/DNREC2000/Library/Fees/DE%20Permit%20Fees.htm

Attach the appropriate fees. Note that your Application will not be considered complete if the appropriate fees are not included.

33. Is a Cover Letter Describing the Process Attached? ☒ YES ☐ NO

Attach a brief cover letter describing your Application.

If the Facility is a New Facility complete Question 34. If not, proceed to Question35.

34. Is a Copy of the Applicant Background Information Questionnaire on Record at the Department? ☐ YES ☐ NO

If NO, complete the rest of Question 34. If YES, process to Question 35.

34.1 Is a Copy of the Applicant Background Information Questionnaire Attached? ☐ YES ☐ NO

For a copy of the Applicant Background Information Questionnaire see
http://www.dnrec.delaware.gov/services/Documents/Chapter79Form.pdf

Attach a copy of the Applicant Background Information Questionnaire if applicable.

35. Check Which Application Forms are Attached:

Application Information

☒ AQM-1	☐ AQM-3.4	☐ AQM-3.9	☐ AQM-3.14	☐ AQM-4.4	☐ AQM-4.9	☐ AQM-6
☐ AQM-2	☐ AQM-3.5	☐ AQM-3.10	☐ AQM-3.15	☐ AQM-4.5	☐ AQM-4.10	
☐ AQM-3.1	☐ AQM-3.6	☐ AQM-3.11	☐ AQM-4.1	☒ AQM-4.6	☐ AQM-4.11	
☐ AQM-3.2	☐ AQM-3.7	☐ AQM-3.12	☐ AQM-4.2	☐ AQM-4.7	☐ AQM-4.12	
☐ AQM-3.3	☐ AQM-3.8	☐ AQM-3.13	☐ AQM-4.3	☐ AQM-4.8	☒ AQM-5	

36. Check Which Documents are Attached:

- ☐ Coastal Zone Determination
- ☐ Coastal Zone Permit
- ☐ Proof of Local Zoning
- ☒ Application Fee
- ☒ Advertising Fee
- ☐ Applicant Background Information Questionnaire
- ☐ Claim of Confidentiality
- ☐ Manufacturer Specification(s)
- ☐ Material Safety Data Sheets (MSDSs)
- ☐ Supporting Calculations
- ☐ Descriptive Cover Letter
- ☒ Other (Specify): **Cover Letter**

Confidentiality Information

37. Do You Consider Any of the Information Submitted With this Application Confidential? ☐ YES ☒ NO

For help on how to submit a confidentiality claim see
http://regulations.delaware.gov/register/december2011/final/15%20DE%20Reg%20864%2012-01-11.htm

If a Claim of Confidentiality is made it MUST meet the requirements of Section 6 of DNREC's Freedom of Information ("FOIA") Regulation at the time the Application is submitted.

Signature Block

I, the undersigned, hereby certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all of its attachments as to the truth, accuracy, and completeness of this information. I certify based on information and belief formed after reasonable inquiry, the statements and information in this document are true, accurate, and complete. By signing this form, I certify that I have not changed, altered, or deleted any portions of this application. I acknowledge that I cannot commence construction, alteration, modification or initiate operation until I receive written approval (i.e. permit, registration, or exemption letter) from the Department. I acknowledge that I may be required to perform testing of the equipment to receive construction or operation approval, and that if I do not receive approval to construct or operate that I may appeal the decision.

Christiana Oh
Owner or Operator

2/12/2020
Date

Signature of Owner or Operator

One Original and One Copy of All Application Forms Should Be Mailed To:
Division of Air Quality
100 W. Water Street, Suite 6A
Dover, Delaware 19904

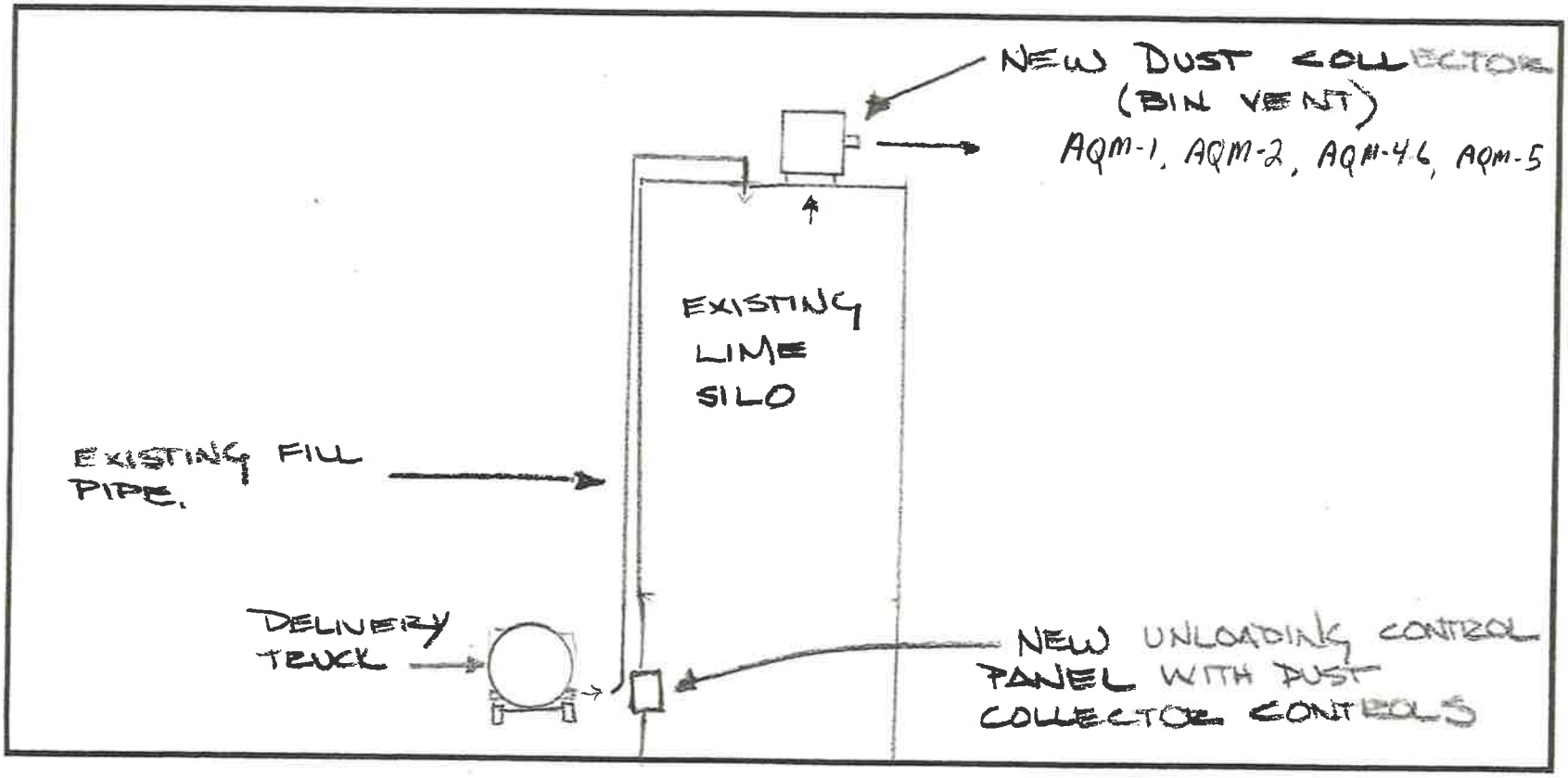
All Checks Should Be Made Payable To:
State of Delaware

DNREC – Air Quality Management Section
Application to Construct, Operate, or Modify Stationary Sources

Form AQM-2
Page 1 of 1

Process Flow Diagram

Sketch the Process Flow Diagram for the equipment or process being applied for. Include each emission unit and control device (even existing emission units that will not be modified by this application). You may identify each emission unit with a simple shape. Label each emission unit and control device with a unique identifier. Show the relationship between each emission unit and/or control device by drawing arrows between them to indicate the flow of air pollutants. List which application forms are included for each emission unit or control device below the shape representing each emission unit or control device . See http://www.delaware.gov/reg2/default.htm for example Process Flow Diagrams for common processes. If you already have a Process Flow Diagram for the equipment or process being applied for, you may attach it to the application instead of using this form.



Baghouse Application

If you are using this form electronically, press F1 at any time for help

General Information	
1.	Facility Name: **Porter Filter Plant**
2.	Equipment ID Number: **Lime Silo Bin Vent**
3.	Manufacturer: **Donaldson Company, Inc.**
4.	Model: **Torit Bin Vent TBV-2**
5.	Serial Number: **13533023-L1-1**
6.	Is the Baghouse Insulated? ☐ YES ☒ NO
7.	Design Minimum Operating Temperature: **None °F**
8.	Design Maximum Operating Temperature: **180 °F**
9.	Are Temperature Controls Provided? ☐ YES ☒ NO
If Yes, complete the rest of Question 9. If no, proceed to Question 10.	
9.1.	Describe the Temperature Controls: **Not Applicable**
10.	Air Flow Through Baghouse: ☒ Forced ☐ Induced ☐ Other (Specify):
11.	Direction of Flow Through Filters: ☐ Inside Out ☒ Outside In
12.	Particulate Removal Efficiency: **99 %**
Attach the Manufacturer's Specification Sheet for the Baghouse and Particle Size Removal Efficiency Curve and basis of determination.	

Compartment Information	
13.	Number of Compartments: **1**
14.	Number of Filters (Bags) Per Compartment: **2**
15.	Can the Compartments be Isolated for Replacement or Repair? ☐ YES ☒ NO

Gas Stream Information	
16.	Maximum Inlet Volumetric Gas Flow Rate: **N/A acfm at N/A °F**
17.	Maximum Outlet Volumetric Gas Flow Rate: **N/A acfm at N/A °F**
18.	Dew Point at Maximum Moisture Content of Gas: **N/A °F**

Gas Stream Information

19. pH of Gas Handled: **N/A**

20. Dust Characteristics: (Check All That Apply)
- ☐ Sticky
- ☐ Wet
- ☐ Corrosive
- ☐ Dry
- ☐ Other (Specify):

Contaminant Information

21. Percent of Each Contaminant in the Waste Gas and Removal Efficiency

If more than five Contaminants are present, attach additional copies of this page as needed.

	Contaminant Name	Contaminant CAS Number	Percent of Waste Gas	Removal Efficiency
21.1.	**N/A**		**%**	%
21.2.			**%**	%
21.3.			**%**	%
21.4.			**%**	%
21.5.			**%**	%

Fabric Filter (Bag) Information

22. Fabric Type:
- ☐ Felted
- ☐ Woven
- ☐ Felted-Woven
- ☒ Membrane
- ☐ PTFE Membrane
- ☐ Sintered Metal
- ☐ Ceramic Cartridge
- ☐ Other (Specify):

23. Fabric Material: **Cellulose Substrate with fine fiber membrane**

24. Maximum Continuous Filter Operating Temperature: **180 °F**

25. Clean Fabric Permeability: **4** scfm/ft^2 at ΔP **0.3-0.8** inches of water

26. Fabric Filter (Bag) Diameter or Width: **12.74 inches**

27. Fabric Filter (Bag) Length: **26 inches**

28. Effective Area Per Filter: **452 square feet**

29. Minimum Effective Air to Cloth Ratio: 2.0 **feet/min**

30. Maximum Effective Air to Cloth Ratio: 4.5 **feet/min**

31. Design Pressure Drop Across Baghouse: N/A **inches water**

32. Describe Determining Factor Fabric Filter Changing/Replacement: **Based on water gauge reading differential of 4 to 5 inches water gauge across the filter.**

Attach the Manufacturer's Specification Sheet for the Fabric Filters (Bags).

Filter Cleaning Information

33. Filter Cleaning Method:
☐ Manual Cleaning ☐ Bag Collapse ☐ Reverse Air Jet
☐ Mechanical Shakers ☐ Sonic Cleaning ☒ Pulse Jet
☐ Pneumatic Shakers ☐ Reverse Air Flow ☐ Other (Specify):

If Reverse Air Jet or Pulse Jet is used, complete the rest of Question 33. If not, proceed to Question 34.

33.1. Air Pressure: 90 **psi**

33.2. Describe How Air Is Supplied to System: **Compressed air piping**

34. Describe How Filter Cleaning Is Initiated: ☒ Manual ☐ Pressure Drop ☐ Timer ☐ Other (Specify):

Hopper Information

35. Is the Hopper Heated? ☐ YES ☒ NO

36. Is there a Hopper Vibrator? ☐ YES ☒ NO

37. Describe How Collected Material is Treated or Disposed of: **Material collected on filter cartridges is removed using pulsed jet and drops back into the silo for usage.**

Stack Information

38. Emission Point Name: **NOT APPLICABLE**

38.1. Stack Height Above Grade: **feet**

38.2. Stack Exit Diameter: **feet**
(Provide Stack Dimensions If Rectangular Stack)

38.3. Is a Stack Cap Present? ☐ YES ☐ NO

38.4. Stack Configuration: ☐ Vertical ☐ Horizontal ☐ Downward-Venting
(check all that apply) ☐ Other (Specify):

38.5. Stack Exit Gas Temperature: **°F**

38.6. Stack Exit Gas Flow Rate: **ACFM**

38.7. Distance to Nearest Property Line: **feet**

38.8. Describe Nearest Obstruction:

38.9. Height of Nearest Obstruction: **feet**

38.10. Distance to Nearest Obstruction: **feet**

Stack Information

38.11. Are Stack Sampling Ports Provided? ☐ YES ☐ NO

Monitoring and Alarm Information

39. Are There Any Alarms You Would Like the Department to Consider When Drafting the Permit? ☐ YES ☒ NO

If YES, complete the rest of Question 39. If NO, proceed to Question 40.

39.1. Describe the System Alarm(s):

If there are more than five alarms, attach additional copies of this page as needed.

	Operating Parameter Monitored	Describe Alarm Trigger	Monitoring Device or Alarm Type	Does the Alarm Initiate an Automated Response?
39.1.1.			☐ Visual ☐ Auditory ☐ Automatic (Remote Monitoring) ☐ Other	☐ NO ☐ YES Describe:
39.1.2.			☐ Visual ☐ Auditory ☐ Automatic (Remote Monitoring) ☐ Other	☐ NO ☐ YES Describe:
39.1.3.			☐ Visual ☐ Auditory ☐ Automatic (Remote Monitoring) ☐ Other	☐ NO ☐ YES Describe:
39.1.4.			☐ Visual ☐ Auditory ☐ Automatic (Remote Monitoring) ☐ Other	☐ NO ☐ YES Describe:
39.1.5.			☐ Visual ☐ Auditory ☐ Automatic (Remote Monitoring) ☐ Other	☐ NO ☐ YES Describe:

Additional Information

40. Is There Any Additional Information Pertinent to this Application? ☐ YES ☒ NO

If YES, complete the rest of Question 40.

40.1. Describe: **Bin Vent is used during the filling of the silo with calcium hydroxide (hydrated lime) which is used to treat drinking water.**

Emissions Information Application

If you are using this form electronically, press F1 at any time for help

Process Information	
1.	Number of Individual Pieces of Process Equipment in Process: **1 - Lime Silo**
2.	Number of Individual Control Devices in Process: **1**

Emissions Information for First Emission Point/Stack						
3.	Emission Point Name: **Lime Silo Bin Vent**					
4.	Equipment ID Number for all Process Equipment and Control Devices Venting Through Emission Point/Stack: **n/a**					
5.	Pollutant Emissions					
If more than 15 pollutants are emitted at this Emission Point/Stack, attach additional copies of this page as needed.						
	Pollutant Name (Specify VOCs and HAPs Individually in 5.10 through 5.18)	CAS Number (Not required for 5.1 through 5.10)	Maximum Uncontrolled Emission Rate at Design Capacity	Maximum Controlled Emission Rate at Design Capacity	Annual Potential to Emit (PTE)	Requested Permitted Annual Emissions
5.1.	Particulate Matter (PM)	**N/A**	**0 lbs/hour**	**0.729 lbs/hour**	**0.0175** tons/year	**0.018** tons/year
5.2.	PM_{10}	**N/A**	**0 lbs/hour**	**0.729 lbs/hour**	**0.0175** tons/year	**0.018** tons/year
5.3.	$PM_{2.5}$		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.4.	Sulfur Oxides (SO_x)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.5.	Nitrogen Oxides (NO_x)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.6.	Carbon Monoxide (CO)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.7.	Total Volatile Organic Compounds (VOCs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.8.	Total Hazardous Air Pollutants (HAPs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year

Emissions Information for First Emission Point/Stack					
5.9. CO_2		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.10. CO_{2e}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.11.		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.12.		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.13.		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.14.		**lbs/hour**	**lbs/hour**	tons/year	tons/year
5.15.		**lbs/hour**	**lbs/hour**	tons/year	tons/year
6. Provide Any Additional Information Necessary to Understanding the Emission Rates Provided Above: **Bin Vent is used during the off-loading of lime into the storage silo. Off-loading will occur no more than 2 times per month. Emissions Rate was determined using EPA AP-42. Maximum Controlled Emission Rate is based on total of 48 hours of operation per year. Requested emissions to maintain same as existing permit.**					
Attach the Basis of Determination or Calculations for each Emission Rate provided above.					

Emissions Information for Second Emission Point/Stack					
7. Emission Point Name:					
8. Equipment ID Number for all Process Equipment and Control Devices Venting Through Emission Point/Stack:					
9. Pollutant Emissions					
If more than 15 pollutants are emitted at this Emission Point/Stack, attach additional copies of this page as needed.					
Pollutant Name (Specify VOCs and HAPs Individually in 9.10 through 9.18)	CAS Number (Not required for 9.1 through 9.10)	Maximum Uncontrolled Emission Rate at Design Capacity	Maximum Controlled Emission Rate at Design Capacity	Annual Potential to Emit (PTE)	Requested Permitted Annual Emissions
9.1. Particulate Matter (PM)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
9.2. PM_{10}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
9.3. $PM_{2.5}$		**lbs/hour**	**lbs/hour**	tons/year	tons/year

Emissions Information for Second Emission Point/Stack						
9.4.	Sulfur Oxides (SO_x)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
9.5.	Nitrogen Oxides (NO_x)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
9.6.	Carbon Monoxide (CO)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
9.7.	Total Volatile Organic Compounds (VOCs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
9.8.	Total Hazardous Air Pollutants (HAPs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
9.9.	CO_2		**lbs/hour**	**lbs/hour**	tons/year	tons/year
9.10.	CO_{2e}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
9.11.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
9.12.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
9.13.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
9.14.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
9.15.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
10.	Provide Any Additional Information Necessary to Understanding the Emission Rates Provided Above:					
Attach the Basis of Determination or Calculations for each Emission Rate provided above.						

Emissions Information for Third Emission Point/Stack
11. Emission Point Name:
12. Equipment ID Number for all Process Equipment and Control Devices Venting Through Emission Point/Stack:
13. Pollutant Emissions
If more than 15 pollutants are emitted at this Emission Point/Stack, attach additional copies of this page as needed.

Emissions Information for Third Emission Point/Stack

	Pollutant Name (Specify VOCs and HAPs Individually in 13.10 through 13.18)	CAS Number (Not required for 13.1 through 13.10)	Maximum Uncontrolled Emission Rate at Design Capacity	Maximum Controlled Emission Rate at Design Capacity	Annual Potential to Emit (PTE)	Requested Permitted Annual Emissions
13.1.	Particulate Matter (PM)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.2.	PM_{10}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.3.	$PM_{2.5}$		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.4.	Sulfur Oxides (SO_x)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.5.	Nitrogen Oxides (NO_x)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.6.	Carbon Monoxide (CO)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.7.	Total Volatile Organic Compounds (VOCs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.8.	Total Hazardous Air Pollutants (HAPs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.9.	CO_2		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.10.	CO_{2e}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.11.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.12.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.13.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.14.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
13.15.			**lbs/hour**	**lbs/hour**	tons/year	tons/year

14. Provide Any Additional Information Necessary to Understanding the Emission Rates Provided Above:

Attach the Basis of Determination or Calculations for each Emission Rate provided above.

Emissions Information for Fourth Emission Point/Stack

15. Emission Point Name:

16. Equipment ID Number for all Process Equipment and Control Devices Venting Through Emission Point/Stack:

17. Pollutant Emissions

If more than 15 pollutants are emitted at this Emission Point/Stack, attach additional copies of this page as needed.

	Pollutant Name (Specify VOCs and HAPs Individually in 17.10 through 17.18)	CAS Number (Not required for 17.1 through 17.10)	Maximum Uncontrolled Emission Rate at Design Capacity	Maximum Controlled Emission Rate at Design Capacity	Annual Potential to Emit (PTE)	Requested Permitted Annual Emissions
17.1.	Particulate Matter (PM)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.2.	PM_{10}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.3.	$PM_{2.5}$		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.4.	Sulfur Oxides (SO_x)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.5.	Nitrogen Oxides (NO_x)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.6.	Carbon Monoxide (CO)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.7.	Volatile Organic Compounds (VOCs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.8.	Total Hazardous Air Pollutants (HAPs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.9.	CO_2		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.10.	CO_{2e}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.11.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.12.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.13.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.14.			**lbs/hour**	**lbs/hour**	tons/year	tons/year
17.15.			**lbs/hour**	**lbs/hour**	tons/year	tons/year

Emissions Information for Fourth Emission Point/Stack

18. Provide Any Additional Information Necessary to Understanding the Emission Rates Provided Above:

Attach the Basis of Determination or Calculations for each Emission Rate provided above.

If there are more than four Emission Points/Stacks, attach additional copies of this form as needed.

Overall Process Emissions

19. Pollutant Emissions

If more than 15 pollutants are emitted from this Process, attach additional copies of this page as needed.

	Pollutant Name (Specify VOCs and HAPs Individually in 19.10 through 19.18)	CAS Number (Not required for 19.1 through 19.10)	Maximum Uncontrolled Emission Rate at Design Capacity	Maximum Controlled Emission Rate at Design Capacity	Annual Potential to Emit (PTE)	Requested Permitted Annual Emissions
19.1.	Particulate Matter (PM)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.2.	PM_{10}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.3.	$PM_{2.5}$		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.4.	Sulfur Oxides (SO_X)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.5.	Nitrogen Oxides (NO_X)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.6.	Carbon Monoxide (CO)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.7.	Total Volatile Organic Compounds (VOCs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.8.	Total Hazardous Air Pollutants (HAPs)		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.9.	CO_2		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.10.	CO_{2e}		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.12.			**lbs/hour**	**lbs/hour**	tons/year	tons/year

Overall Process Emissions

19.13.		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.14.		**lbs/hour**	**lbs/hour**	tons/year	tons/year
19.15.		**lbs/hour**	**lbs/hour**	tons/year	tons/year

20. Provide Any Additional Information Necessary to Understanding the Emission Rates Provided Above:

Attach the Basis of Determination or Calculations for each Emission Rate provided above.

Minor New Source Review Information

21. Does the Process Have the Potential to Emit More Than Five Tons Per Year of Any Pollutant? ☐ YES ☐ NO

22. Is the Source New or Existing? ☐ NEW ☐ EXISTING
See Question 11 of AQM-1

If the Process has the Potential to Emit more than five tons per year of any pollutant, and is a New Source, a Control Technology Analysis pursuant to Regulation No. 1125 Section 4 must be conducted and attached to this application.

Major New Source Review Information

23. Does the Process Have the Potential to Emit More Than the Significance Level for Any Pollutant? *(Check All That Apply)*

- ☐ Greater Than 25 Tons Per Year of Particulate Matter (PM)
- ☐ Greater Than 15 Tons Per Year of PM_{10}
- ☐ Greater Than 10 Tons Per Year of $PM_{2.5}$
- ☐ Greater Than 40 Tons Per Year of Sulfur Dioxide(SO_2)
- ☐ Greater Than 25 Tons Per Year of Nitrogen Oxides (NO_X) in New Castle and Kent County
- ☐ Greater Than 100 Tons Per Year of Nitrogen Oxides (NO_X) in Sussex County
- ☐ Greater Than 100 Tons Per Year of Carbon Monoxide (CO)
- ☐ Greater Than 25 Tons Per Year of Total Volatile Organic Compounds (VOCs) in New Castle and Kent County
- ☐ Greater Than 50 Tons Per Year of Total Volatile Organic Compounds (VOCs) in Sussex County
- ☐ Greater Than 75,000 Tons Per Year of Equivalent Carbon Dioxide (CO_{2e})

If the Process has the Potential to Emit greater than any of the amounts listed above 7 DE Admin. Code 1125 Sections 2 and/or 3 apply. Contact the Department at (302) 323-4542 or (302) 739-9402 for additional information

Additional Information

24. Is There Any Additional Information Pertinent to this Application? ☐ YES ☐ NO

If YES, complete the rest of Question 24.

24.1. Describe: